Amendments to the Claims

Claims 1-13 (Cancelled)

Claim 14 (Currently amended): A method of assaying for protease activity inside a cell, comprising:

~~measuring an initial fluorescence activity in said cell to establish a baseline;~~

introducing into said cell a nucleic acid construct having a sequence encoding a chimeric protein comprising an amino terminal portion of a green fluorescent reporter protein operably linked to a sequence encoding a protease substrate followed by a sequence encoding a carboxyl terminal portion of the green fluorescent reporter protein, wherein the presence of a peptide bond between an amino terminal portion and a carboxyl-terminal portion of said protease substrate sequence is essential to generate or maintain fluorescence of said chimeric protein; ~~and~~

expressing said construct in said cell; and

measuring a change in the fluorescence activity caused by proteolytic cleavage of said chimeric protein in said cell compared to a control cell selected from the group consisting of: a control cell lacking active protease and a control cell expressing a green fluorescent reporter protein lacking said protease substrate.

Claims 15-29 (Cancelled)

Claim 30 (Currently amended): A method of assaying for proteolytic cleavage of a serine protease substrate inside a cell, comprising:

~~measuring an initial fluorescence activity in said cell to establish a baseline;~~

introducing into said cell a nucleic acid construct having a sequence encoding a chimeric protein comprising an amino terminal portion of a green fluorescent reporter protein operably linked to a sequence encoding a serine protease substrate sequence followed by a sequence encoding a carboxyl terminal portion of ~~a~~the green fluorescent reporter protein, wherein the presence of a peptide bond between an amino terminal portion and a

carboxyl-terminal portion of said serine protease substrate sequence is essential to generate or maintain fluorescence of said chimeric protein; ~~and~~

expressing said construct in said cell; and

measuring a change in the fluorescence activity caused by proteolytic cleavage of said chimeric protein in said cell compared to a control cell selected from the group consisting of: a control cell lacking active protease and a control cell expressing a green fluorescent reporter protein lacking said protease substrate.

Claim 31 (Original): The method of claim 30 wherein said serine protease substrate sequence is a NS3/4A serine protease substrate sequence.

Claim 32 (Original): The method of claim 30 wherein said serine protease is a NS3/4A serine protease.

Claim 33 (Currently Amended): The method of claim ~~33~~2 wherein said NS3/4A serine protease is a mutant NS3/4A protease having a serine converted to a glycine.